

1/23

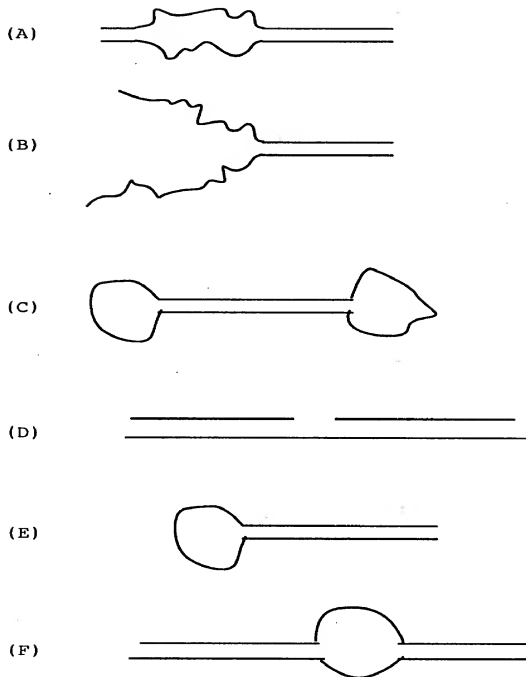


Figure 1 (A-F)

Construct Forms Comprising at Least one Single-Stranded Region

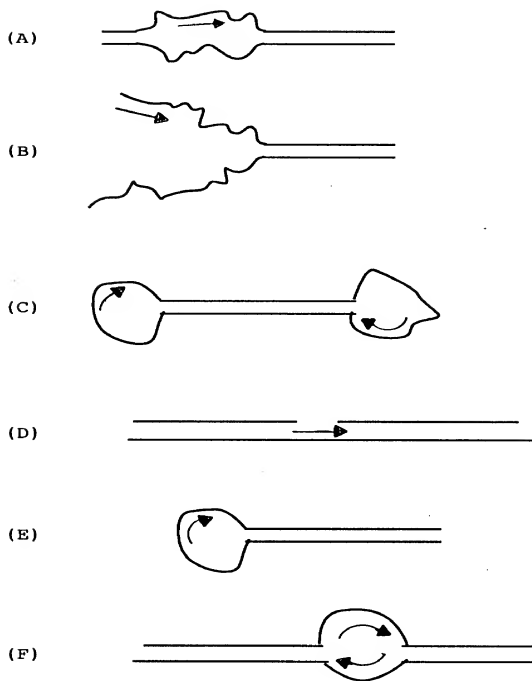


Figure 2 (A-F)

Functional Forms of the Construct

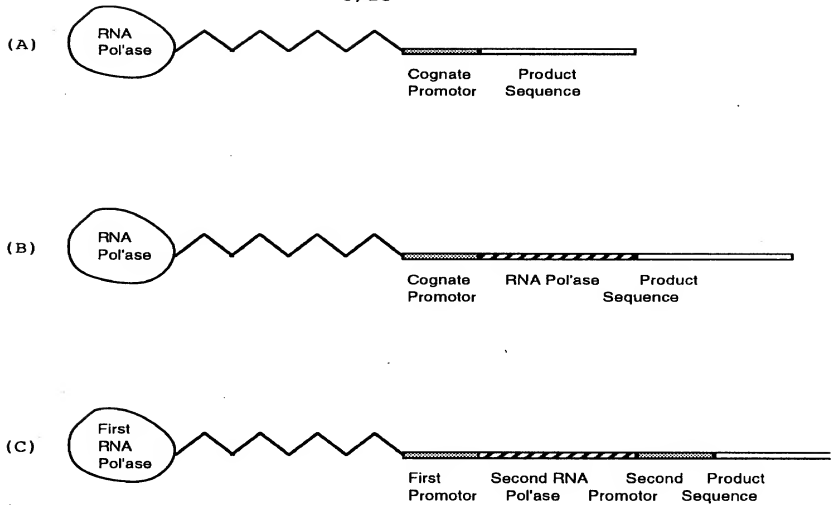


Figure 3 (A-C)

**Three Constructs with an RNA Polymerase
Covalently Attached to a Transcribing Cassette**

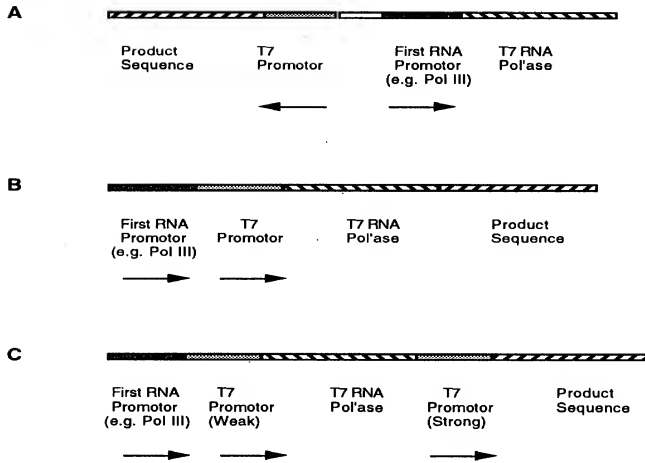


Figure 4 (A-C)

**Three Constructs with Promoters
for Endogenous RNA Polymerase**

M13mp18. Seq Length: 7250

1.	AATGCTACTA	CTATTAGTAG	AATTGATGOC	AOCTTTTCAG	CTOGOGOOOC
51.	AAATGAAAAT	ATAGCTAAAC	AGGTTATTGA	CCATTGOGA	AATGTATCTA
101.	ATGGTCAAAC	TAAATCTACT	OGTTGCGAGA	ATTGGGAATC	AACTGTTACA
151.	TGGAATGAAA	CTTCCAGACA	COGTACTTTA	GTTGCATATT	TAAAACATGT
201	TGAGCTACAG	CACCAGATTG	AGCAATTAAG	CTCTAAGCCA	TOCGCAAAAA
251	TGACCTCTTA	TCAAAAGGAG	CAATTAAGGG	TACTCTCTAA	TOCTGAOCTG
301.	TTGGAGTTTG	CTTCCGGTCT	GGTTGCGCTT	GAAGCTOGAA	TTAAACOGOG
351.	ATATTTGAAG	TCTTTOGGGC	TTCCTCTTAA	TCTTTTGTAT	GCAATCOGCT
401.	TTGCTTCTGA	CTATAATAGT	CAGGGTAAAG	AOCTGATTTT	TGATTTATGG
451.	TCATTCTCGT	TTTCTGAACT	GTTTAAAGCA	TTTGAGGGGG	ATTCAATGAA
501.	TATTTATGAC	GATTCGCGAG	TATTGGAOGC	TATCCAGTCT	AAACATTTTA
551.	CTATTACOOO	CTCTGGCAAA	ACTTCTTTTG	CAAAAGOCTC	TOGCTATTTT
601.	GGTTTTTATC	GTOGTCTGGT	AAOGAGGGT	TATGATAGTG	TTGCTCTTAC
651.	TATGOOCTGT	AATTCCTTTT	GGCGTTATGT	ATCTGCATTA	GTTGAATGTG
701.	GTATTOCTAA	ATCTCAACTG	ATGAATCTTT	CTACCTGTAA	TAATGTTGTT
751.	COGTAGTTC	GTTTTATTAA	CGTAGATTTT	TCTTCCCAAC	GTCCTGACTG
801.	GTATAATGAG	CCAGTTCCTA	AAATGCGATA	AGGTAATTCA	CAATGATTAA
851.	AGTTGAAATT	AAOCCATCTC	AAGOOCAATT	TACTACTOGT	TCTGGTGTTC
901.	TOGTACGGGC	AAGCTTATT	CACTGAATGA	GCAGCTTTGT	TACGTTGATT
951.	TGGGTAAATGA	ATATCOGGTT	CTTGTCGAAG	ATTACTCTTG	ATGAAGGTCA
1001	GOCAGOCTAT	GCGOCTGGTC	TGTACAOOGT	TCATCTGTCC	TCTTTCAAAG
1051	TTGGTCAGTT	CGGTTCCCTT	ATGATTGAOC	GTCTGOGOOT	CGTTGCGOCT
1101	AAGTAACATG	GAGCAGGTGG	OGGATTTGGA	CACAATTTAT	CAGGOGATGA
1151	TACAAATCTC	CGTTGTACCTT	TGTTTGGCGC	TTGGTATAAT	OGCTGGGGGT
1201	CAAAGATGAG	TGTTTTAGTG	TATTCCTTCG	OCTCTTTOGT	TTTAGGTTGG

Figure 5

M13mp18 Nucleic Acid Sequence

1251	TGCTTCGTGTA	GTGCGCATTAC	GTATTTTACC	CGTTTAATGG	AAACTTCCTC
1301	ATGAAAAAGT	CTTTAGTCCT	CAAAGCCTCT	GTAGCGGTG	CTACCTCGT
1351	TCGGATGCTG	TCCTTCGCTG	CTGAGGGTGA	CGATCCGCA	AAAGCGGCT
1401	TTAACTCCCT	GCAAGCTCA	GCGACCGAAT	ATATCGGTTA	TGCGTGGGG
1451	ATGGTTGTTG	TCATTGTGG	CGCAACTATC	GGTATCAAGC	TGTTTAAGAA
1501	ATTCACCTCG	AAAGCAAGCT	GATAAACCGA	TACAATTAAA	GGCTCCTTTT
1551	GGAGCCTTTT	TTTTTGGAGA	TTTTCAACGT	GAAAAAATTA	TTATTCGCAA
1601	TTCTTTTAGT	TGTTCTTTTC	TATTCTCACT	CGCTGAAAC	TGTTGAAAGT
1651	TGTTTAGCAA	AACCCCATAC	AGAAAATTCA	TTTACTAACG	TCTGGAAGA
1701	CGACAAAAC	TTAGATCGTT	ACGCTAACTA	TGAGGGTTGT	CTGTGGAATG
1751	CTACAGCGGT	TGTAGTTTGT	ACTGGTGAAG	AAACTCAGTG	TTAAGGTACA
1801	TGGGTTCTTA	TTGGGCTTGC	TATCCCTGAA	AATGAGGGTG	GTGGCTCTGA
1851	GGGTGGGGGT	TCTGAGGGTG	GCGGTTCTGA	GGGTGGGGGT	ACTAAACCTC
1901	CTGAGTACGG	TGATACACCT	ATTCGGGGCT	ATACTTATAT	CAACCTCTC
1951	GACGGCACTT	ATCCGCTCG	TACTGAGCAA	AACCGCTA	ATCCTAATCC
2001	TTCTCTTGAG	GAGTCTCAGC	CTCTTAATAC	TTTCATGTTT	CAGAAATAATA
2051	GGTTCCGAAA	TAGGCAGGGG	GCATTAACTG	TTTATACGGC	CACTGTTACT
2101	CAAGGCACTG	ACCCCGTTAA	AACCTATTAC	CAGTACACTC	CTGTATCATC
2151	AAAAGCCATG	TATGACGCTT	ACTGGAACGG	TAAATTCAGA	GACTCGGCTT
2201	CAAGGCACTG	ACCCCGTTAA	AACCTATTAC	CAGTACACTC	CTGTATCATC
2151	AAAAGCCATG	TGCTCAAC	TCCTGTCAAT	GCTGGGGGGG	GCTCTGGTGG
2201	TCATTCTGG	CTTTAATCAA	GATCATTGG	TTTGTGAATA	TCAAGGCCAA
2251	TGTTCTGAAC	TGCTCAAC	TCCTGTCAAT	GCTGGGGGGG	GCTCTGGTGG
2301	TGTTCTGGT	GGCGCTCTG	AGGGTGGTGG	CTCTGAGGGT	GGCGGTTCTG
2351	AGGGTGGGG	CTCTGAGGGA	GGGGTTCCG	GTGGTGGCTC	TGGTTCCGGT
2401	GATTTTGATT	ATGAAAAGAT	GGCAAAAGCT	AATAAGGGGG	CTATGACCGA
2451	AAATGCGGAT	GAAAACGGC	TACAGTCTGA	CGCTAAAGGC	AAACTTGATT

Figure 5

M13mp18 Nucleic Acid Sequence

2501	CTGTGCTAC	TGATTACGGT	GCTGCTATCG	ATGGTTTCAT	TGGTGAOGTT
2551	TOGGGOCITG	CTAATGGTAA	TGGTGCTACT	GGTGATTTTG	CTGGCTCTAA
2601	TTGCCAAATG	GCTCAAGTOG	GTGAOGGTGA	TAATTCAOCT	TTAATGAATA
2651	ATTTGCGTCA	ATATTTACCT	TOOCTOOCCTC	AATOGGTTGA	ATGTGGOOCT
2701	TTTGTCTTTA	GOGCTGGTAA	AOCATATGAA	TTTTCTATTG	ATTGTGACAA
2751	AATAAACTTA	TTOOGTGGTG	TCTTTGCGTT	TCTTTTATAT	GTTGGOAOCT
2801	TTATGTATGT	ATTTTCTACG	TTTGCTAACA	TACTGOGTAA	TAAGGAGTCT
2851	TTATCATGOC	AGTTCTTTTG	GGTATTGCGT	TATTATTGOG	TTTOCTCGGT
2901	TTCTTCTGG	TAACTTTGTT	OGGCTATCTG	CTTACTTTTC	TTAAAAAGGG
2951	CTTGGTAAG	ATAGCTATTG	CTATTTTCATT	GTTTCTTGCT	CTTATTATTG
3001	GGCTTAACTC	AATTCCTGTG	GGTTATCTCT	CTGATATTAG	CGCTCAATTA
3051	COCTCTGACT	TTGTTCAAGG	TGTTCAAGTTA	ATTCTCOOCT	CTAATGOGCT
3101	TCOCTGTTTT	TATGTTATTC	TCTCTGTAAA	GGCTGCTATT	TTCATTTTTG
3151	ACGTTAAACA	AAAAATCGTT	TCTTATTTGG	ATTGGGATAA	ATAATATGGC
3201	TGTTTATTTT	GTAACGGCA	AATTAGGCTC	TGGAAAGACG	CTOGTTAGOG
3251	TTGGTAAGAT	TCAGGATAAA	ATTGTAGCTG	GGTGCAAAAT	AGCAACTAAT
3301	CTTGATTTAA	GGCTTCAAAA	OCTCOOGCAA	GTOGGGAGGT	TOGCTAAAAC
3351	GCTOGGCGTT	CTTAGAATAC	CGGATAAGOC	TTCTATATCT	GATTTGCTTG
3401	CTATTGGGOG	CGGTAATGAT	TOCTAOGAATG	AAAATAAAAA	CGGCTTGCTT
3451	GTTCTOGATG	AGTGOGGTAC	TTGGTTTAAT	AOCOCTTCTT	GGAATGATAA
3501	GGAAGACAG	CCGATTATTG	ATTGGTTTCT	ACTGCTOGT	AAATTAGGAT
3551	GGGATATTAT	TTTTCTTGTT	CAGGACTTAT	CTATTGTTGA	TAAACAGGOG
3601	CGTCTGCAT	TAGCTGAACA	TGTTGTTTAT	TGTGTGTGTC	TGGACAGAAT
3651	TACTTTACCT	TTTGTGGTGA	CTTTATATTC	TCTTATTACT	GCGCTGAAAA
3701	TGDOCTGOC	TAAATTACAT	GTTGGGCTTG	TAAATATGG	CGATTCTCAA
3751	TTAAGOOCTA	CTGTTGAGOG	TTGGCTTTAT	ACTGGTAAGA	ATTTGTATAA
3801	OGCATATGAT	ACTAAACAGG	CTTTTCTAG	TAATTATGAT	TOCGGTGTTT

Figure 5

M13mp18 Nucleic Acid Sequence

3851	ATTCTTATTT	AACGCGTTAT	TTATCACACG	GTCGGTATTT	CAAACCATTA
3901	AATTTAGGTC	AGAAGATGAA	ATTAACATAA	ATAATATTGA	AAAAGTTTTC
3951	TGCGGTTCTT	TGTCITGOGA	TTGGATTGTC	ATCAGCATT	ACATATAGTT
4001	ATATAACCCA	AOCTAAGCOG	GAGGTTAAAA	AGGTAGTCTC	TCAGAACAT
4051	GATTTTGATA	AATTCACTAT	TGACTCTTCT	CAGGTCCTTA	ATCTAAGCTA
4101	TGCTATGTT	TTCAAGGATT	CTAAGGGAAA	ATTAATTAAT	AGOGAOGATT
4151	TACAGAAGCA	AGGTTATTCA	CTCACATATA	TTGATTTATG	TACTGTTTCC
4201	ATTAATAAAG	GTAATTCAAA	TGAAATTGTT	AAATGAATT	AATTTTGTTT
4251	TCTTGATGTT	TGTTTCATCA	TCTTCTTTTG	CTCAGGTAAT	TGAAATGAAT
4301	AATTOGCTC	TGOGOGATTT	TGTAACCTGG	TATTCAAAGC	AATCAGGOGA
4351	AATCOGTTATT	GTTTCTCOOG	ATGTAAAAGG	TACTGTTACT	GTATATTTCAT
4401	CTGACGTTAA	AOCTGAAAAT	CTACGCAATT	TCTTTATTTT	TGTTTTACGT
4451	GCTAATAATT	TTGATAATGGT	TGGTTCAATT	CCTTCCATAA	TTCAGAAGTA
4501	TAATCCAAAC	AATCAGGATT	ATATTGATGA	ATTGOCATCA	TCTGATAATC
4551	AGGAATATGA	TGATAATTCC	GCTCCTTCTG	GTGGTTTCTT	TGTTCCGCAA
4601	AATGATAATG	TTACTCAAAC	TTTTAAAATT	AATAACGTTT	GGGCAAAAGGA
4651	TTTAATACGA	GTTGTGGAAT	TGTTTGTAAG	GTCTAATACT	TCTAAATCCT
4701	CAATGTATT	ATCTATTGAC	GGCTCTAATC	TATTAGTTGT	TAGTGCTCCT
4751	AAAGATATTT	TAGATAACCT	TCCTCAATT	CTTTCTACTG	TTGATTTGCC
4801	AACTGACCAG	ATATTGATTG	AGGGTTTGAT	ATTTGAGGTT	CAGCAAGGTG
4851	ATGCTTTAGA	TTTTTCATTT	GCTGCTGGCT	CTCAGGTTGG	CACTGTTGCA
4901	GGGGGTGTTA	ATACTGACCG	CCTCACCTCT	GTTTATCTTT	CTGCTGGTGG
4951	TTGGTTGGT	ATTTTAAATG	GCGATGTTTT	AGGGCTATCA	GTTGCGGCAT
5001	TAAAGACTAA	TAGCCATTCA	AAAATATTGT	CTGTGCCACG	TATTCTTAAG
5051	CTTTCAGGTC	AGAAGGGTTC	TATCTCTGTT	GGCCAGAAATG	TCCCTTTTAT
5101	TAAAGACTAA	TAGCCATTCA	AAAATATTGT	CTGTGCCACG	TATTCTTAAG
5151	CGATTGAGCG	TCAAAATGTA	GGTATTTCCA	TGAGCGTTTT	TCCTGTTGCA

Figure 5

M13mp18 Nucleic Acid Sequence

5201	ATGGCTGGCG	GTAATATTGT	TCTGGATATT	ACCAGCAAGG	CCGATAGTTT
5251	GAGTTCTCT	ACTCAGGCAA	GTGATGTTAT	TACTAATCAA	AGAAGTATTG
5301	CTACAAGGT	TAATTTGGGT	GATGGACAGA	CTCTTTTACT	CGGTGGGCTC
5351	ACTGATTATA	AAAACACTTC	TCAAGATTCT	GGGTADGGT	TCCTGTCTAA
5401	AATOCCTTTA	ATGGGCTCC	TGTTTAGCTC	CCGCTCTGAT	TCCAAAGAGG
5451	AAAGCAOGTT	ATAOGTGCTC	GTCAAAGCAA	CCATAGTAAG	CGGCTGTAG
5501	CGGGGCATTA	AGGGGGGGG	GTGTGGTGGT	TAAGGGGAGC	GTGACCGCTA
5551	CACTTGOCAG	CGGCTAGGG	CCGCTCCTT	TCGCTTTCTT	CCCTTCCTTT
5601	CTGGCAGGT	TGGGGGCTT	TCCCGTCAA	GCTCTAAATC	GGGGGCTCC
5651	TTTAGGGTTC	CGATTTAGTG	CTTTACGGCA	CCGACGCC	AAAAAACTTG
5701	ATTTGGGTGA	TGGTTCAAGT	AGTGGGCGAT	CGGCTGATA	GACGGTTTTT
5751	CGGCTTTTGA	CGTTGGAGTC	CAOGTTCTTT	AATAGTGGAC	TCCTGTTCOA
5801	AACTGGAACA	ACACTCAAGC	CTATCTGGG	CTATTCTTTT	GATTTATAAG
5851	GGATTTTGGC	GATTTGGGAA	CCACCATCAA	ACAGGATTTT	CGGCTGCTGG
5901	GGCAAGCAG	CGTGGAGGCG	TTGCTGCAAC	TCTCTCAGGG	CCAGGGGGTG
5951	AAGGGCAATC	AGCTGTTGGC	CGTCTCGCTG	GTGAAAGAA	AAACCAAGCT
6001	GGGGGCAAT	AGGCAAGCG	CCCTCCCGG	CGGTTGGGC	GATTCATTAA
6051	TGCAGCTGGC	AGGACAGGTT	TCCGAGTGG	AAAGGGGGCA	GTGAGGGCAA
6101	CGCAATTAAT	GTGAGTTAGC	TCACTCATT	GGCAGGCGAG	GCTTTACACT
6151	TTATGCTTCC	GGCTGGTATG	TTGTGTGGAA	TTGTGAGGG	ATAACAATTT
6201	CACACAGGAA	ACAGCTATGA	CCATGATTAC	GAATTGGAGC	TGGGTACCGG
6251	GCGATCCTCT	AGAGTGAAGC	TGCAGGCATG	CAAGCTTGGC	ACTGGGGGTC
6301	GTTTTACAAC	GTGTTGACTG	GGAAAAAGCT	GGGTTAACCC	AACCTAATGG
6351	CCTTGCAGCA	CAATCCGCTT	TGGCAGCTG	GCGTAATAGC	GAAGAGGGCC
6401	GCAAGGATGG	CCCTTCCCAA	CAGTTGGGCA	GCTGAATGG	CGAATGGGGC
6451	TTTGCTGGGT	TTGGGGCAAG	AGAAGGGGTG	CGGGAAGGCT	GGCTGGAGTG
6501	CGATCTTCT	GAGGGGAGTA	CGGTGGTGGT	CCGCTCAAGC	TGGCAGATGC

Figure 5

M13mp18 Nucleic Acid Sequence

6551	ACGGTTACGA	TGCGCCCATC	TACAACCAACG	TAAOCTATOC	CATTACGGTC
6601	AATOCGCGT	TTGTTCCAC	GGAGAATOCG	ACGGGTTGTT	ACTOGCTCAC
6651	ATTTAATGTT	GATGAAAGCT	GGCTACAGGA	AGGOCAGACG	CGAATTATTT
6701	TTGATGGCGT	TCCTATTGGT	TAAAAAATGA	GCTGATTTAA	CAAAAAATTA
6751	ACGCGAATTT	TAACAAAATA	TTAACGTTTA	CAATTTAAAT	ATTTGCTTAT
6801	ACAATCTTCC	TGTTTTTGGG	GCTTTTCTGA	TTATCAACOG	GGGTACATAT
6851	GATTGACATG	CTAGTTTTAC	GATTACGGTT	CATCGATTCT	CTTGTTTGCT
6901	CCAGACTCTC	AGGCAATGAC	CTGATAGCCT	TTGTAGATCT	CTCAAAAAATA
6951	GCTACCCCTCT	CCGGCATGAA	TTTATCAGCT	AGAACGGTTG	AATATCATAT
7001	TGATGGTGAT	TTGACTGTCT	CCGGCCTTTC	TCACCCCTTTT	GAATCTTTAC
7051	CTACACATTA	CTCAGGCATT	GCATTTAAAA	TATATGAGGG	TTCTAAAAAT
7101	TTTTATCCTT	GCGTTGAAAT	AAAGGCTTCT	CCCGCAAAAG	TATTACAGGG
7151	TCATAATGTT	TTTGGTACAA	CCGATTTAGC	TTTATGCTCT	GAGGCTTTAT

Figure 5

M13mp18 Nucleic Acid Sequence

COMPLEMENTARY TO M₁₃

POSITION	5' * 3'	POSITION	
645	AGCAACACTATCATA	631	M ₁₃ /1
615	ACGACGATAAAAAACC	601	M ₁₃ /2
585	TTTTCGCAAAAGAAGT	571	M ₁₃ /3
555	AATAGTAAATGTITT	541	M ₁₃ /4
525	CAATACTGCGGAATG	511	M ₁₃ /5
495	TGAATCCCCCTCAAA	481	M ₁₃ /6
465	AGAAAACGAGAATGA	451	M ₁₃ /7
435	CAGGTCCTTTACCCCTG	421	M ₁₃ /8
405	AGGAAAGCGGATTGC	391	M ₁₃ /9
375	AGGAAAGCCCGAAAGA	361	M ₁₃ /10

COMPLEMENTARY TO SS PHAGE DNA

POSITION	5' * 3'	POSITION	
351	ATATTTGAAGTCTTT	366	M ₁₃ /11
371	TCTTTTGTGCAAT	386	M ₁₃ /12
391	CTATAATACTCAGGG	406	M ₁₃ /13
411	TGATTTATGGTCATT	426	M ₁₃ /14
431	GTTTAAAGCATTTGA	446	M ₁₃ /15
451	TATTTATGACGATTC	466	M ₁₃ /16
471	TATCCAGTCTAAACA	486	M ₁₃ /17
491	CTCTGGCAAACTTC	506	M ₁₃ /18
511	TCGCTATTTGGTTT	526	M ₁₃ /19
531	AAACGAGGGTTATGA	546	M ₁₃ /20

Figure 6

Primers for Nucleic Acid Production
Derived from M13mp18 Sequence

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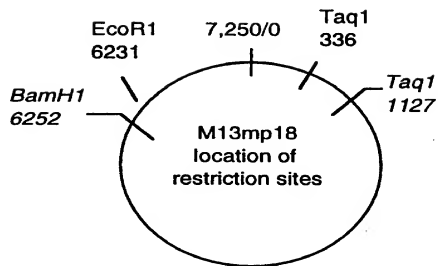


Figure 7

Appropriate M13mp18 Restriction Sites

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Lane 1: from calf thymus + Taq digested mp18 amplification reaction
Lane 2: from Taq digested mp18 amplification reaction
Lane 3: from calf thymus amplification reaction
Lane 4: øX174 Hinf1 size marker

Figure 8

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Lane 1: no template

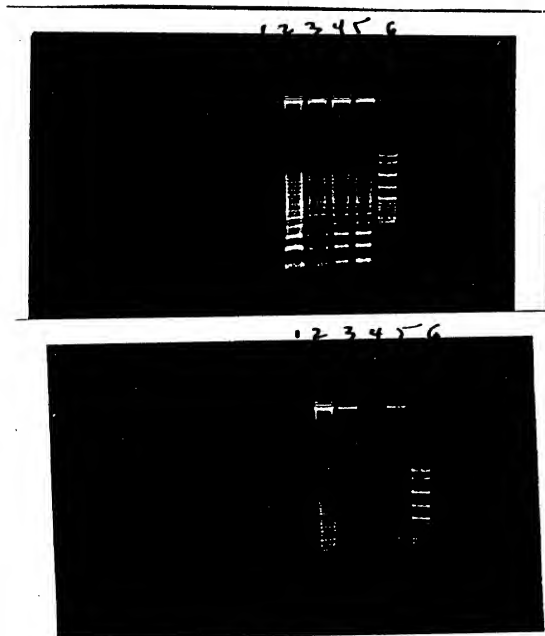
Lane 2: mp18 template, phosphate buffer

Lane 3: MspI/pBR322 size marker

Lane 4: mp18 template, MOPS buffer

Figure 9

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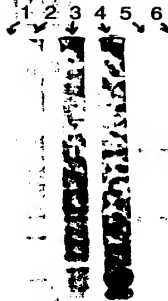


Top= (+) Template
Bottom= (-) Template

Lane 1: phosphate buffer
Lane 2: MES
Lane 3: MOPS
Lane 4: DMAB
Lane 5: DMG
Lane 6: pBR322/MspI size marker

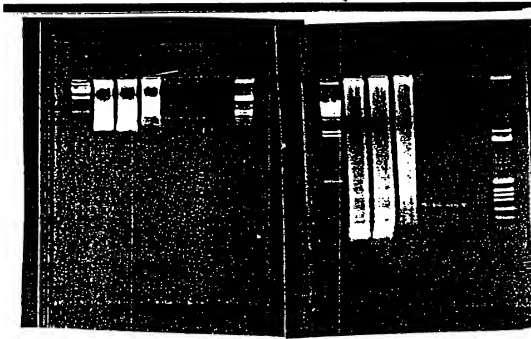
Figure 10

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Lane 1: DMAB buffer, no template
Lane 2: DMAB buffer, mp18 template
Lane 3: DMG buffer, no template
Lane 4: DMG buffer, mp18 template
Lane 5: No reaction
Lane 6: 200 ng Taq I digested mp18
size marker/positive control

Figure 11



First Time Interval Second Time Interval

Agarose Gel Analysis

- Lane 1: lambda Hind III marker
- Lane 2: Amp/Untreated
- Lane 3: Amp/Kinased
- Lane 4: Amp/Kinased/Ligated
- Lane 5: PCR/Untreated
- Lane 6: PCR/Kinased
- Lane 7: PCR/Kinased/Ligated
- Lane 8: ϕ X174/HinfI marker

Figure 12

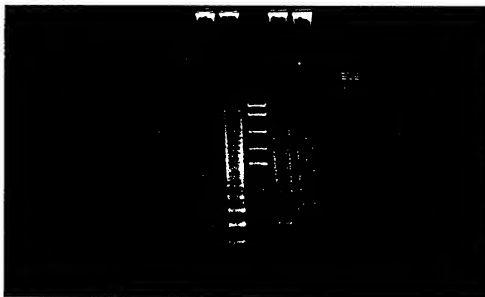
18/23



Figure 13

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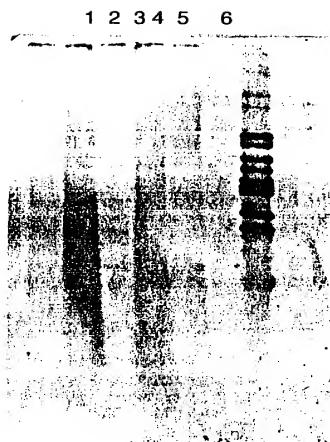
1 2 3 4 5 6



Lane 1: Primers alone
Lane 2: Primers + taq digested M13 DNA
Lane 3: Molecular weight markers
Lane 4: Primers + RNA
Lane 5: Primers alone
Lane 6: M13 digested DNA
Buffer was dimethyl amino glycine, pH 8.6

Figure 14

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Lane 1: Primers alone
Lane 2: Primers + taq digested M13 DNA
Lane 3: Molecular weight markers
Lane 4: Primers + RNA
Lane 5: Primers alone
Lane 6: M13 digested DNA
Buffer was dimethyl amino glycine, pH 8.6

Figure 15

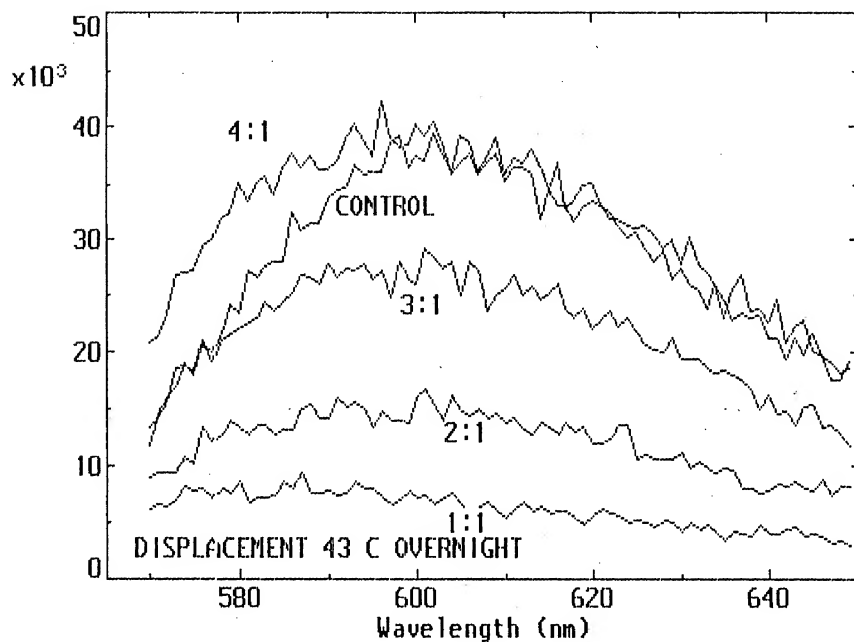


Figure 16

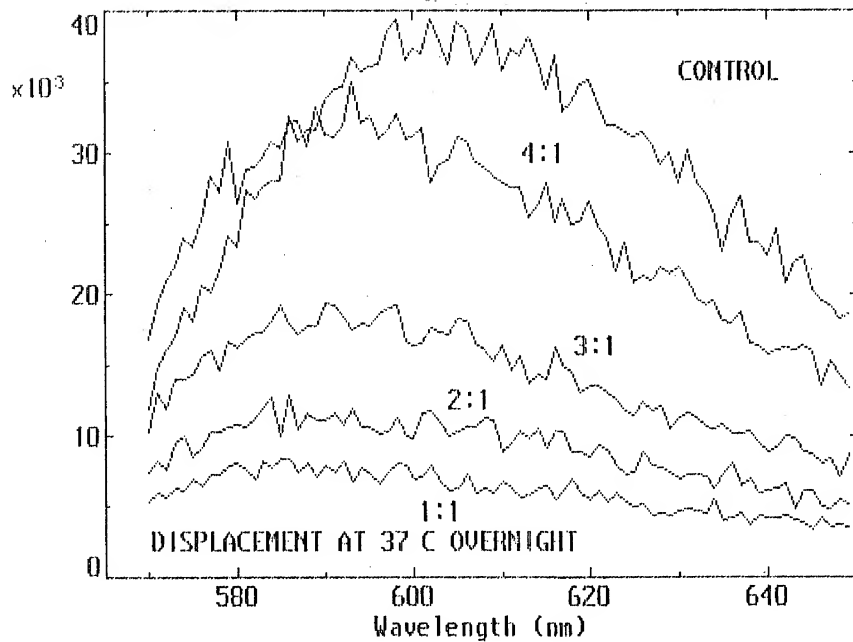


Figure 17

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pIBI 31-BH5-2

fmet AUG of Lac z {T7 Promotor region...
LAC PROMOTOR..ATG ACC ATG ATT ACG CCA GAT ATC AAA TTA ATA CGA CTC ACT ATA
oligo 50-mer 3'- tac t*aa t*gc ggt* ct*a t*ag t*Vt aat* tat* gct* gag t*ga t*at* c-5'
10 base insert
T7 RNA Start (« T3 Promotor Region)
IGGG CTC ICCT TTA GTG ACG GTT AAT
...») «- T3 Start Signal

pIBI 31 BSII/HCV

fmet AUG of Lac z {T3 Promotor region ->} T3 RNA Start
LAC PROMOTOR ..ATG ACC ATG ATT ACG CCA AGC TCG AAA TTA ACC CTC ACT AAA /GGG
oligo 50-mer 3'- tac t*aa t*ac t*aa t*gc ggt* t*V--10 base insert-----
{«- T7 Promotor Region }
MULTIPLE CLONING SITE + 390 BASE INSERT CTA /TAG TGA GTC CGT ATT AAT....
«- T7 Start Signal
5'-ct*a t*ag t*ga gt*c gt*a tt*a at*.....

Figure 18